

A2 55. (Amended) The method of claim 54, wherein step (3) comprises the step of transmitting each of the plurality of data packets across a different path in a computer network.

Please add the following new claims:

A3 ~~Sub B2~~ 68. A transmitting computer that transmits data packets to a receiving computer, wherein the transmitting computer comprises computer instructions that execute the step of, for each transmitted data packet, inserting a discriminator value for extraction by the receiving computer, wherein the discriminator value is generated on the basis of information previously shared with the receiving computer;

69. The transmitting computer of claim 68, wherein the transmitting computer further comprises computer instructions that insert as the discriminator value an Internet Protocol address into a header portion of each data packet.

70. The transmitting computer of claim 68, wherein the transmitting computer transmits information to the receiving computer sufficient to establish the set of valid discriminator values.

71. A method of transmitting data packets from a first computer to a second computer, comprising the steps of:

- Claims 71-84 can be classified in 713/201 and can be restricted out as a separate group
DW 1/24/03*
- (i) determining a sender's Internet Protocol (IP) address selected from a first set of IP addresses allocated to the first computer;
 - (ii) determining a receiver's IP address selected from a second set of IP addresses allocated to the second computer;
 - (iii) creating a packet header comprising the sender's and receiver's IP addresses; and

- (iv) the first computer transmitting to the second computer a data packet comprising the packet header.

72. The method of claim 71, wherein the first and second sets of addresses are mutually exclusive.

73. The method of claim 71, wherein in steps (i) and (ii) the IP address determination is based on a pseudo-random algorithm that selects an IP address pair.

A3 74. A method of transmitting data packets between a first computer and a second computer, comprising the steps of:

- (i) the second computer receiving a data packet including a packet header comprising a first sender Internet Protocol (IP) address and a first receiver IP address;
- (ii) determining a second sender IP address selected from a first set of IP addresses allocated to the first computer;
- (iii) determining a second receiver IP address selected from a second set of IP addresses allocated to the second computer;
- (iv) accepting the packet when first and second sender IP addresses match and first and second receiver IP addresses match, otherwise, rejecting the packet.

75. The method of claim 76, wherein the first and second sets of IP addresses are mutually exclusive.

76. The method of claim 74, wherein in steps (ii) and (iii) the IP address determination is based on a pseudo-random algorithm that selects an IP address pair.

77. The method of claim 76, further comprising the step of maintaining a window of

IP address pairs corresponding to a sequence of IP address pairs generated by the pseudo-random algorithm, and

wherein step (iv) accepts any data packet whose packet header IP addresses match any of the IP address pairs presently in the window.

78. A receiving computer that receives data packets from a transmitting computer, wherein the receiving computer comprises computer instructions that execute the steps of:

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- (i) receiving data packets from a transmitting computer including a packet header comprising a first sender Internet Protocol (IP) address and a first receiver IP address;
 - (ii) for each data packet, determining a second sender IP address selected from a first set of IP addresses allocated to the first computer;
 - (iii) for each data packet, determining a second receiver IP address selected from a second set of IP addresses allocated to the second computer;
 - (iv) for each data packet, accepting the packet when first and second sender IP addresses match and first and second receiver IP addresses match, otherwise, rejecting the packet.

79. The receiving computer of claim 78, wherein the first and second sets of IP addresses are mutually exclusive.

80. The receiving computer of claim 78, wherein in steps (ii) and (iii) the IP address determination is based on a pseudo-random algorithm that selects an IP address pair.

81. The receiving computer of claim 80, wherein the receiving computer maintains a window of valid second IP address pairs, wherein the window is moved in response to detecting

matches.

82. A transmitting computer that transmits data packets to a receiving computer, wherein the transmitting computer comprises computer instructions that execute the steps of:

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- (i) determining a sender's IP address selected from a first set of IP addresses allocated to the first computer;
 - (ii) determining a receiver's IP address selected from a second set of IP addresses allocated to the second computer;
 - (iii) creating a packet header comprising the sender's and receiver's IP addresses; and
 - (iv) the first computer transmitting to the second computer a data packet comprising the packet header.

83. The transmitting computer of claim 82, wherein the first and second sets of IP addresses are mutually exclusive.

84. The transmitting computer of claim 82, wherein in steps (i) and (ii) the IP address determination is based on a pseudo-random algorithm that selects an IP address pair.

Remarks

Applicants have amended claims 44 and 55 to fix typographical and clerical errors. Applicants have added new claims 68-84 to more completely claim the disclosed invention. Support for the new claims may be found at least on pages 21-24.